

The Impact of PEARLS Debriefing Training during COVID-19: Changes in Perception of Barriers, Comfort, and Frequency of Hot Debriefing

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Introduction

- Pandemics have a profound psychological impact on healthcare workers and lead to an increased burden of depression, anxiety, and Post-Traumatic Stress Disorder.¹
- Prior studies have shown that debriefing decreases professional burnout, increases morale and resilience, and improves clinical outcomes.²⁻⁴
- Kings County Hospital and University Hospital of Brooklyn experienced a massive surge of COVID-19 cases resulting in an unprecedented number of deaths.
- Our goal was to educate and empower our team using the PEARLS debriefing framework.
- This is a descriptive study on the effect of PEARLS training on debriefing frequency and comfort in residents. We also identified perceived barriers to debriefing and tried to combat these during training.

Methods

- A pre-post intervention design was used to evaluate efficacy of hot debriefing training curriculum.
- 98 emergency medicine residents at our academic institution participated.
- A survey was administered that assessed current debriefing frequency, comfort, and barriers.
- The PEARLS post-event hot debriefing tool⁵ was used because of the emphasis on the psychological well-being and self-reflective assessment.
- We conducted three separate training sessions on debriefing for physicians.



Results

		Pre-Survey (n = 41)	Post-Survey (n=46)	p-value
		(n, %)	(n, %)	
PGY	1	21 (51%)	9 (20%)	<0.001
	2	7 (17%)	11 (24%)	0.6
	3	4 (10%)	12 (26%)	0.06
	4	9 (22%)	11 (24%)	1
	5-6	0 (0%)	3 (7%)	1
Gender	female	23 (56%)	31 (67%)	
	male	17 (41%)	14 (30%)	
	nonbinary	1 (2%)	1 (2%)	

		Pre-Survey (n = 41)	Post-Survey (n=46)	p-value
		Median (IQR 25%, 75%)	Median (IQR 25%, 75%)	
Percent of last 10 ED codes and/or deaths that were followed by a debrief		2.0 (1.0, 3.0)	3.0 (1.0, 5.0)	0.41
Comfort in leading a debrief (Scale of 0-100% comfortable)		40.0 (29.25, 61.75)	51.0 (29.75, 70.0)	0.39
Rank of who leads debriefs	1	senior resident	attending physician	
	2	attending physician	senior resident	
	3	junior resident	junior resident	
	4+	RNs, PCT, RT, others	RNs, PCT, RT, others	
Top three barriers to debriefing	1	time	time	
	2	gathering	gathering	
	3	comfort with debriefing	comfort with debriefing	

- 41 residents completed the pre-survey and 46 residents completed the post-survey.
- Mann-Whitney U 2-tailed test with alpha set at 0.05 was used to analyze the data.
- There was a trend towards increased frequency and comfort with debriefing after the educational sessions.
- The top three barriers to debriefing remain unchanged: time, gathering, and comfort with debriefing.

Conclusion

- Our educational sessions sparked an interest in debriefing at our academic institutions and there was a trend towards increased frequency of debriefing and comfort with debriefing.
- Senior residents and attending physicians at our institutions are most likely to lead debriefings.
- Further work can be directed towards addressing top barriers to debriefing: time, gathering, and comfort with debriefing.

References

1. Morganstein, J, et. al. (2017). Pandemics: Health Care Emergencies. In Textbook of Disaster. Psychiatry (2nd ed., pp. 270–284). Cambridge University Press.
2. Wolfe, H, et al. Interdisciplinary ICU Cardiac Arrest Debriefing Improves Survival Outcomes. Crit Care Med. 2014;42(7): 1688-1695.
3. Tannenbaum, S, et. al.. Do Team and Individual Debriefs Enhance Performance? A Meta-Analysis. [Hum Factors](#). 2013 Feb; 55(1):231-245.
4. Schmidt, M, et. al. Debrief in Emergency Departments to Improve Compassion Fatigue and Promote Resiliency, *J. Trauma Nursing*. 2017;24(5):317-322.
5. Eppich, W, et al. Promoting Excellence and Reflective Learning in Simulation (PEARLS). *SSH*, 2015; 10(2):106-115.